



U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Registration Division (7505P)
 1200 Pennsylvania Ave., N.W.
 Washington, D.C. 20460

EPA Reg. Number:

71368-115

Date of Issuance:

6/18/15

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Panther Duo Herbicide

Name and Address of Registrant (include ZIP Code):

Matthew Granahan
 Nufarm Americas Inc.
 11901 South Austin Avenue
 Alsip, IL 60803

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Kathryn Montague, Product Manager 23
 Herbicide Branch, Registration Division (7505P)

Date:

6/18/15

2. You are required to comply with the data requirements described in the EDSP Order identified below:

a. Flumioxazin GDCI-0129034

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI Order listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://www.epa.gov/oppsrrd1/contacts_prd.htm

3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

4. Make the following label changes before you release the product for shipment:

- Revise the EPA Registration Number to read, “EPA Reg. No. 71368-115.”

5. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

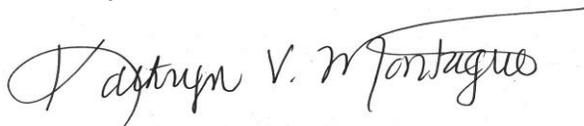
If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 11/03/2014

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EPA Reg. No. 71368-115
Decision No. 495991

If you have any questions, please contact Shanta Adeeb by phone at 703-347-0502, or via email at adeeb.shanta@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Kathryn V. Montague". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Kathryn V. Montague, Product Manager 23
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Enclosure

[MASTER LABEL]

ACCEPTED

06/18/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 71368-115

GROUP 4 & 14 HERBICIDE

PANTHER™ DUO

HERBICIDE

Not Intended For Residential Use.

ABN: PANTHER DUO HERBICIDE - AG [Subpart 1 – Agricultural]

ABN: PANTHER DUO HERBICIDE – NON-CROP [Subpart 2 – Non-crop and Aquatics]

ACTIVE INGREDIENTS:

Flumioxazin*	2.53%
2,4-Dichlorophenoxyacetic acid**	38.87%

OTHER INGREDIENTS:	<u>58.60%</u>
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TOTAL:	<u>100.00%</u>
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*2-[7 -fluoro-3. 4-dihydro-3-oxo-4-(2-propynyl) -2H-1 • 4-benzoxazin-6-yl]-4.5.6. 7 -tetrahydro-1 H-isoindole-1.3(2H)-dione
Panther Duo contains 0.26 pounds flumioxazin per gallon.

**Contains 4.0 pounds per gallon 2,4-Dichlorophenoxyacetic acid.

Isomer specific by AOAC method No. 978.05

[For ≤ 5 Gallon Containers:] [Shake Well Before Use]

[For > 5 Gallon Containers:] [Shake Well, Agitate or Recirculate Before Use]

KEEP OUT OF REACH OF CHILDREN DANGER / PELIGRO

PRECAUCION AL USUARIO: Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO.71368-RRL
EPA EST. NO.

MANUFACTURED FOR
NUFARM, INC.
11901. S AUSTIN AVE.
ALSIP, IL 60803



071368-00RRL.20150615.Panther Duo

[SUBPART 1]

[PANTHER DUO HERBICIDE – AG]

[For use in Agricultural Market Segment]

[SUBPART 1]

GROUP 4 & 14 HERBICIDE

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NET CONTENTS:

[Designation as "NONREFILLABLE" or "REFILLABLE" for containers ≥ 5 GAL]

[SUBPART 1]

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER / PELIGRO

Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

All applicators must wear:

- long-sleeved shirt and long pants,
- shoes and socks,
- chemical-resistant gloves, and
- protective eyewear (goggles, face shield or safety glasses).

All mixers, loaders, and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes and socks,
- chemical-resistant gloves,
- chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate, and
- protective eyewear (goggles, face shield or safety glasses).

For aerial application to Sugarcane mixers / loaders must also wear:

- chemical-resistant boots and coveralls.

For aerial application to Wheat mixers / loaders must also wear:

- filtering face piece respirator (N95, R95 or P95).

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE (personal protective equipment) may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

USER SAFETY RECOMMENDATIONS	
Users Should:	
<ul style="list-style-type: none">• Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.• Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.	
FIRST AID	
IF IN EYES	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 to 20 minutes.• Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	
NOTE TO PHYSICIANS	
This product contains a phenoxy herbicidal chemical. There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient. Probable mucosal damage may contraindicate the use of gastric lavage. Overexposure to materials other than this product may have occurred.	

[SUBPART 1]

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, non-target plants and aquatic invertebrates.

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff maybe hazardous to non-target plants and aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

This pesticide is toxic to plants and should be used strictly in accordance with the drift and run-off precautions on this label in order to minimize off-site exposures.

Under some conditions this product may have a potential to run-off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, such as no till, limited till and contour plowing; these methods also reduce pesticide run-off. Use of vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where run-off could occur will minimize water run-off and is recommended.

This product contains a chemical with properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Do not contaminate water used for irrigation or domestic purposes especially in areas where grapes, cotton, tomatoes or other susceptible plants are grown.

Do not apply this product directly to, or permit to drift onto cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers or other desirable crop or ornamental plants which are susceptible to 2,4-D herbicide. Do not apply near susceptible plants since very small quantities of the 2,4-D will cause severe injury during the growing or dormant periods. Crops contacted by this product sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction.

MIXING AND LOADING: Most cases of ground water contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of ground water supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent ground water contamination.

PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow to come in contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: coveralls, chemical-resistant gloves made of any water-proof material, shoes plus socks, protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

USE RESTRICTIONS

Do not apply this product through any type of irrigation system.

[SUBPART 1]

Do not use in or near a greenhouse.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not apply to frozen or snow covered soil.

Do not apply to farm alleys or roads where traffic may result in treating dust settling onto crops or other desired vegetation.

Do not apply within 300 yards of non-dormant pears.

Post directed and layby application of this product should only be applied to healthy growing crops.

Do not apply to powdery soils that are susceptible to wind displacement unless irrigation can be applied immediately after application.

Read and follow all directions, restrictions and precautions on this label and on the labels of any products for which a tank mixture is being considered.

PRODUCT INFORMATION

INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY DO NOT USE THIS PRODUCT.

Crop varieties vary in response to 2,4-D and some are easily injured. Apply this product only to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, State Agricultural Extension Service or qualified crop consultant for advice.

Be sure that use of this product conforms to all applicable laws, rules and regulations. Certain states have restrictions pertaining to application distances from susceptible crops. The applicator should become familiar with these laws, rules or regulations and follow them exactly.

MIXING INSTRUCTIONS

Add about one-half the water to the mixing tank, then add this product with agitation and finally the rest of water with continuing agitation.

NOTE: Adding oil, wetting agent, or other surfactants to the spray may increase effectiveness on weeds but also may reduce selectivity to crops, resulting in crop damage.

COMPATIBILITY

If this product is to be tank mixed with fertilizers or with other pesticides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 quart) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5 to 15 minutes after mixing.

APPLICATION PROCEDURES

Apply by air or ground equipment in sufficient gallonage to obtain adequate coverage, except as otherwise directed on this label. Use 2 or more gallons of water per acre for aerial application and 10 or more gallons of water per acre for ground application.

RESISTANCE MANAGEMENT

This product contains active ingredients in Groups 4 and 14. Any weed population may contain or develop plants that are resistant to this product and other Group 4 and 14 herbicides. Weed species with acquired resistance to Group 4 and 14 herbicides may eventually dominate the weed population if Group 4 and 14 herbicides are used repeatedly in the same application area or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by this product or other Group 4 and 14 herbicides.

To delay or prevent herbicide resistance consider the following practices:

- Avoid the use of more than two consecutive applications of this product or other herbicides that have a similar target site of action.
- Alternate herbicides used for weed control.
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitor treated weed populations for loss of efficacy.
- Contact your local extension specialist, other experts appropriate to aquatic use, and/or manufacturer for resistance and/or integrated weed management practices.

For further information or to report suspected resistance, you may contact Nufarm Inc. at the following toll-free number: 800-345-3330.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

When applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or

[SUBPART 1]

coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application:

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

[SUBPART 1]

ROTATIONAL RESTRICTIONS

The following rotational crops may be planted after applying this product at the listed rate. Planting earlier than the labeled rotational interval may result in crop injury.

For the Rotation Restrictions of the following crops, see the associated sections of this label:

- Cotton
- Field Corn
- Soybean
- Sugarcane
- Wheat

• Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER DUO HERBICIDE RATES	CROPS	ROTATION INTERVALS
1- 2 pt/A		
	Peanut ² , Rice, Sorghum, Sweet Potato, Sunflower and Tobacco	30 days ¹
	Barley, Dry and Snap Beans, Flax, Peas, Rye, Safflower and Sweet Corn	3 months
	Alfalfa, Canola, Clover, Oats, Potato, Sugar Beet and all other crops not listed ²	4 months if soil is tilled prior to planting 8 months if no tillage is performed
	Lentil	6 months
Up to 3 pt/A		
	Peanut, Sorghum, and Sweet Potato	30 days ¹
	Cotton, Rice, Sunflower and Tobacco	2 months ¹
	Barley, Dry and Snap Beans, Flax, Pea, Rye, Safflower and Sweet Corn	4 months
	Alfalfa, Clover, Oats, Potato, Sugar Beet	5 months if soil is tilled prior to planting 10 months if no tillage is performed
	Canola and all other crops not listed ²	6 months if soil is tilled prior to planting 12 months if no tillage is performed
	Lentil	7 months
Up to 4 pt/A		
	Peanut, Rice, Sorghum, Sunflower and Tobacco	4 months
	Alfalfa, Canola, Potato, Sugar Beet and all other crops not listed ²	6 months if soil is tilled prior to planting 12 months if no tillage is performed
	Transplanted on raised beds only: melon, pepper and tomato ³	2 months (if the top 4 inches of the beds have been removed)
6 to 8 pt/A	Peanut, Rice, Sorghum, Sunflower and Tobacco	9 months
	Alfalfa, Canola, Sugar Beet and all other crops not listed ² Trees can be transplanted 2 months after an application of this product ⁴	12 months if soil is tilled prior to planting 18 months if no tillage is performed

* See additional restrictions and directions for use in **CORN** and **SOYBEANS** sections of label for 7 day PPI.

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

² Successful soil bioassay must be performed prior to planting crops.

³ **Arizona, California and Hawaii only.**

⁴ Transplanted apple, apricot, avocado, bushberries (including blueberry), cherry, fig, grape, grapefruit, lemon, nectarine, nut trees (including pistachio), olive, orange, peach, pear, plum (including dried plum), and tangerine can be planted 2 months after application of 2 to 8 pints per acre of this product.

SMALL QUANTITY DILUTION TABLE

To spray small areas use the following dilution table.

If Dosage on Label Shows Following Rate Per Acre	Use this Amount for each Gallon of Water Per 1,000 Square Feet
2 pints (1 quart)	0.73 fluid ounces
3 pints (1-1/2 quarts)	1.10 fluid ounces
4 pints (2 quarts)	1.46 fluid ounces
6 pints (3 quarts)	2.20 fluid ounces

WEED LIST

Table - Weeds Controlled by Postemergence Activity of This Product

Annual and Biennial Weeds

Beggarticks*	Mallow* (venice or little)	Rough fleabane
Bullthistle	Marshelder	Russian thistle*
Coffeeweed	Marestail / Horseweed	Salsify (western or common)
Common cocklebur	Morningglory	Shepherd's purse
Common burdock	(common, ivy, woolly)	Smartweeds* (annual species)
Cutleaf eveningprimrose	Musk thistle* (***)	Sowthistle (annual or spiny)
Common lambsquarters	Mustards (except blue mustard)	Sunflower
Hairy galinsoga	Pepper weeds (except perennial)	Vervains*
Henbit	Pigweeds** (Amaranthus spp.)	Vetches
Jimsonweed	Prickly lettuce	Wild carrot
Knotweed*	Purple deadnettle	Wild lettuce
	Ragweed (common or giant)	Wild parsnips

Perennial Weeds

Bindweed* (hedge, field, European)	Goldenrod*	Orange hawkweed*
Blue lettuce	Healall	Plantains
Canada thistle*	Ground ivy*	Sowthistle (perennial)
Catnip	Hoary cress*	Vervains*
Chicory	Ironweed*	Wild garlic*
Dandelion Docks*	Jerusalem artichoke	Wild onion*
Dogbane*	Many flowered aster	
	Nettles* (including stinging)	

*These species may require repeated applications, when permissible by label restrictions, and/or use of the higher rate labeled on this product label even under ideal conditions for application.

**Control of pigweeds in the High Plains area of Texas and Oklahoma may not be satisfactory with this product.

***Not registered for control of musk thistle in California.

[SUBPART 1]

Table - Broadleaf Weeds Controlled by Residual Activity of This Product
BROADLEAF WEED SPECIES

SECTION A		ORGANIC MATTER	SOIL TYPE	PANTHER SC HERBICIDE RATE
COMMON NAME	SCIENTIFIC NAME			
Carpetweed	<i>Mollugo verticillata</i>	Up to 5%	All Soil Types	2 pt/A
Chickweeds,				
Common	<i>Stellaria media</i>			
Mouseear	<i>Cerastium vulgatum</i>			
Dandelion	<i>Taraxacum officinale</i>			
Eclipta	<i>Eclipta prostrata</i>			
Eveningprimrose, Cutleaf	<i>Oenothera laciniata</i>			
Field Pennycress	<i>Thlaspi arvense</i>			
Florida Pusley	<i>Richardia scabra</i>			
Henbit	<i>Lamium amplexicaule</i>			
Lambsquarters, Common	<i>Chenopodium album</i>			
Little Mallow	<i>Malva parviflora</i>			
Marestail/Horseweed	<i>Conyza canadensis</i>			
Mayweed/False Chamomile	<i>Matricaria maritima</i>			
Nightshades,				
Black	<i>Solanum nigrum</i>			
Eastern Black	<i>Solanum ptycanthum</i>			
Hairy	<i>Solanum sarrachoides</i>			
Pigweeds,				
Redroot	<i>Amaranthus retroflexus</i>			
Smooth	<i>Amaranthus hybridus</i>			
Spiny Amaranth	<i>Amaranthus spinosus</i>			
Tumble	<i>Amaranthus albus</i>			
Prickly Lettuce	<i>Lactuca serriola</i>			
Prickly Sida (Teaweed)	<i>Sida spinosa</i>			
Puncturevine	<i>Tribulus terrestris</i>			
Purslane, Common	<i>Portulaca oleracea</i>			
Radish, Wild	<i>Raphanus raphanistrum</i>			
Redmaids	<i>Calandrinia ciliata</i> var. <i>menziessii</i>			
Shepherd's-purse	<i>Capsella bursa-pastoris</i>			
Smallflower Morningglory	<i>Jacquemontia tamnifolia</i>			
Sowthistle, Prickly	<i>Sonchus asper</i>			
Spotted Spurge	<i>Euphorbia maculata</i>			
Venice Mallow	<i>Hibiscus trionum</i>			

[SUBPART 1]

Table - Broadleaf Weeds Controlled by Residual Activity of This Product (continued)

SECTION B		ORGANIC MATTER	SOIL TYPE	PANTHER DUO HERBICIDE RATE
COMMON NAME	SCIENTIFIC NAME			
All weeds listed in Section A plus:		Up to 3%	All Soil Types	2.5 pt/A all labeled crops
Coffee Senna	<i>Cassia occidentalis</i>			
Common Ragweed	<i>Ambrosia artemisiifolia</i>			
False Chamomile	<i>Tripleurospermum maritima</i>			
Florida Beggarweed	<i>Desmodium tortuosum</i>			
Golden Crownbeard	<i>Verbesina encelioides</i>			
Hairy Indigo	<i>Indigofera hirsuta</i>			
Hemp Sesbania	<i>Sesbania exaltata</i>	3 to 5%	Coarse and Medium Soils (sandy loam, loamy sand, loamy, silt-loam, silt, sandy clay, sandy clay loam)	2 pt/A Cotton 2.5 pt/A Soybean 3 pt/A all other labeled crops
Jimsonweed	<i>Datura stramonium</i>			
Kochia	<i>Kochia scoparia</i>			
London Rocket	<i>Sisymbrium irio</i>			
Morningglories, ¹				
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>			
Ivyleaf	<i>Ipomoea hederacea</i>			
Red/Scarlet	<i>Ipomoea coccinea</i>			
Tall	<i>Ipomoea purpurea</i>			
Mustard, Wild	<i>Brassica kaber</i>			
Palmer Amaranth	<i>Amaranthus palmeri</i>			
Spurred Anoda	<i>Anoda cristata</i>			
Tropic Croton	<i>Croton glandulosus</i>			
Waterhemp,				
Common	<i>Amaranthus rudis</i>			
Tall	<i>Amaranthus tuberculatus</i>			
Wild Poinsettia	<i>Euphorbia heterophylla</i>			
Yellow Rocket	<i>Barbarea vulgaris</i>	Fine Soils: (silty clay, silty clay, loam, clay, clay loam)	2 pt/A Cotton a 3 pt/A Soybean, and all other labeled crops	

¹ Morningglory species are not adequately controlled on fine soils or soils with greater than 3% organic matter.

[SUBPART 1]

Table - Weeds Suppressed by Residual Activity of This Product

BROADLEAF WEED SPECIES		ORGANIC MATTER	PINTS PER ACRE
COMMON NAME	SCIENTIFIC NAME		
Bristly Starbur	<i>Acanthospermum hispidum</i>	Up to 5%	2.0 to 3.0
Copperleaf, Hophornbeam	<i>Acalypha ostryifolia</i>		
Ragweed, Giant	<i>Ambrosia trifida</i>		
Russian Thistle	<i>Salsola iberica</i>		
Smartweeds,			
Ladysthumb	<i>Polygonum persicaria</i>		
Pennsylvania	<i>Polygonum pensylvanicum</i>		
Smellmelon	<i>Cucumis melo</i>		
Velvetleaf	<i>Abutilon theophrasti</i>		
Wild Buckwheat	<i>Polygonum convolvulus</i>		
Wormwood, Biennial	<i>Artemisia biennis</i>		
GRASS WEED SPECIES			
Barnyardgrass	<i>Echinochloa crus-galli</i>		
Bluegrass, Annual	<i>Poa annua</i>		
Crabgrass, Large	<i>Digitaria sanguinalis</i>		
Foxtail, Giant	<i>Setaria faberi</i>		
Goosegrass	<i>Eleusine indica</i>		
Lovegrass, California	<i>Eragrostis diffusa</i>		
Panicums,			
Fall	<i>Panicum dichotomiflorum</i>		
Texas	<i>Panicum texanum</i>		
Ryegrass, Italian	<i>Lolium multiflorum</i>		
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>		
Cheat	<i>Bromus secalinus</i>	Up to 5%	1.5 to 3
Downy Brome	<i>Bromus tectorum</i>		

Table – Grass Weeds Controlled by Residual Activity of This Product

GRASS WEED SPECIES		ORGANIC MATTER	SOIL TYPE	PINTS PER ACRE
Barnyardgrass	<i>Echinochloa crus-galli</i>	Up to 5%	All Soil Types	4.0
Bluegrass, Annual	<i>Poa annua</i>			
Crabgrass, Large	<i>Digitaria sanguinalis</i>			
Foxtail, Giant	<i>Setaria faberi</i>			
Goosegrass	<i>Eleusine indica</i>			
Lovegrass, California	<i>Eragrostis diffusa</i>			
Panicums,				
Fall	<i>Panicum dichotomiflorum</i>			
Texas	<i>Panicum texanum</i>			
Ryegrass, Italian	<i>Lolium multiflorum</i>			
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>			

SPECIFIC USE DIRECTIONS

**DIRECTIONS FOR USE IN FALL AND SPRING PREPLANT BURNDOWN AND FALLOW SEEDBED PROGRAMS
(Preplant to Crop)**

RESTRICTIONS AND LIMITATIONS

- Do not apply to frozen or snow covered soil.
- Do not perform any tillage operation after application or residual weed control will be reduced.
- Observe all rotational intervals prior to planting as listed in the **Rotational Restrictions** section of the label.

FALL BURNDOWN AND FALLOW SEEDBED PROGRAMS

This product, at 2 to 3 pints per acre can be used in the fall to provide residual weed control in fields that will be planted the following spring (refer to **Rotational Restrictions** table for rates and rotational intervals prior to planting). Weeds controlled by residual activity are listed in Table - **Broadleaf Weeds Controlled by Residual Activity of This Product** (sections A and B), Broadleaf Weeds Controlled by Residual Activity of This Product; Table - **Weeds Controlled by Fall and Spring Preplant Burndown Programs**. If weeds have emerged at the time of application, use this product in combination with a labeled burndown herbicide. Application must be made no earlier than October 15 in Region 2 or November 15 in Region 1 or when soil temperature falls below 50°F at a 2 inch depth to maintain residual weed control into the spring (April 1 in Region 1 and May 1 in Region 2) or up until planting, whichever comes first. This product can be used in a fall burndown or fallow seedbed program outside of Regions 1 and 2, however the length of residual control may be variable.

Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

Fall Application Regions:

Region 1: Alabama, Arkansas, Georgia, Kentucky, Mississippi, Oklahoma, Tennessee and Virginia

Region 2: Delaware, Kansas, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, West Virginia and Wisconsin

Applications of this product at rates less than 2 pints per acre will provide burndown of labeled weeds, but residual control should not be expected.

SPRING BURNDOWN PROGRAMS

This product may be used alone or in combination with labeled preplant burndown herbicides to assist in the postemergence burndown of emerged weeds and provide residual weed control prior to crop emergence. Weeds controlled by residual activity are listed in Table **Broadleaf Weeds Controlled by Residual Activity of This Product**.

No-till planters that incorporate the soil during planting may result in decreased weed control in the row. Apply this product after planting soybeans when these types of planters are used. See **SOYBEAN** section of label for soybean preplant interval. This product cannot be applied after planting field corn.

This product can be used at 1 to 3 ounces per acre alone or with labeled preplant burndown herbicides to enhance the speed of burndown and increase weed spectrum.

This product can be used at 1 to 3 ounces per acre in field corn and soybean burndown programs.

Weeds controlled by postemergence and / or residual activity are listed in Table - **Weeds Controlled by Fall and Spring Preplant Burndown Programs**. Preplant burndown treatment tank mixes and rates are:

Herbicide	Rate
Program 1¹	
Panther Duo	2 to 3 pt/A
Plus	
COC	1 pt/A
or	
Program 2¹	
Panther Duo	2 to 3 pt/A
Plus	
Glyphosate	0.5 to 1.0 lb ai/A (equivalent to 1 to 2 pt/A of Credit [®] 41 Extra or Roundup Original [®])
Plus	
NIS	0.5% v/v
or	or
COC + AMS	1pt/A + 17 lbs/100 gals of water
or	
Program 3¹	
Panther Duo	1 pt/A

[SUBPART 1]

Plus	
COC	1pt/A
or	
Program 4¹	
Panther Duo	1 pt/A
Plus	
Glyphosate	1.0 lb ai/A (equivalent to 2 pt/A of Credit [®] 41 Extra or Roundup Original [®])
Plus	
NIS	0.5% v/v
or	or
COC + AMS	1pt/A + 17 lbs/100 gals of water

¹ Dicamba (Clash[®], Banvel[®] or Diablo[®]), at 0.188 pounds AI per acre (6 fluid ounces per acre of Banvel 4 or Diablo) can be added to assist in the control of emerged broadleaves. Refer to dicamba label for rotational restrictions.

Table - Weeds Controlled by Fall and Spring Preplant Burndown Programs

WEEDS CONTROLLED ¹		POSTEMERGENCE & RESIDUAL	
		Program 1	Program 2
COMMON NAME	SCIENTIFIC NAME	Weeds 3 inches or less	
Annual Bluegrass	<i>Poa annua</i>	No	Yes
Chamomile, False	<i>Matricaria maritime</i>	No	Yes
Cheatgrass	<i>Bromus tectorum</i>	No	Yes
Chickweed, Common	<i>Stellaria media</i>	No	Yes
Chickweed, Mouseear	<i>Cerastium vulgatum</i>	No	Yes
Dandelion	<i>Taraxacum officinale</i>	Yes	Yes
Deadnettle, Purple	<i>Lamium purpureum</i>	Yes	Yes
Groundsel, Cressleaf	<i>Senecio glabellus</i>	-	Yes
Henbit	<i>Lamium amplexicaule</i>	Yes	Yes
Kochia	<i>Kochia scoparia</i>	Yes	Yes
Marestail/Horseweed	<i>Conyza canadensis</i>	Yes	Yes
Mallow, Common	<i>Malva neglecta</i>	No	Yes
Prickly Lettuce	<i>Lactuca serriola</i>	Yes	Yes
Wormwood, Biennial	<i>Artemisia biennis</i>	Yes	Yes
Weeds 12 inches or less			
Canola, Volunteer	<i>Brassica napus</i>	Yes	Yes
Carolina Geranium	<i>Geranium carolinianum</i>	Yes	Yes
Eveningprimrose, Cutleaf	<i>Oenothera laciniata</i>	Yes	Yes
Flixweed	<i>Descurainia sophia</i>	Yes	Yes
Mustard, Tansy	<i>Descurainia pinnata</i>	Yes	Yes
Mustard, Wild	<i>Brassica kaber</i>	Yes	Yes
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	Yes	Yes

¹ Refer to glyphosate labels for additional weeds controlled.

Table - Weeds Controlled by Fall and Spring Preplant Burndown Programs

WEEDS CONTROLLED ¹		BURNDOWN ONLY	
		Program 3	Program 4
COMMON NAME	SCIENTIFIC NAME	Weeds 4 inches or less	
Annual Bluegrass	<i>Poa annua</i>	No	Yes
Buttercup, Smallflower	<i>Ranunculus parviflorus</i>	No	Yes
Chamomile, Mayweed	<i>Anthemis cotula</i>	No	Yes
Chickweed, Common	<i>Stellaria media</i>	No	Yes
Deadnettle, Purple	<i>Lamium purpureum</i>	No	Yes
Evening primrose, Cutleaf	<i>Oenothera laciniata</i>	Yes	Yes
Fleabane, Philadelphicus	<i>Erigeron philadelphicus</i>	No	Yes

[SUBPART 1]

Garlic, Wild	<i>Allium vineale</i>	No	Yes
Henbit	<i>Lamium amplexicaule</i>	Yes	Yes
Marestail/Horseweed	<i>Conyza canadensis</i>	No	Yes ¹
Prickly Lettuce	<i>Lactuca serriola</i>	Yes	Yes
Radish, Wild	<i>Raphanus raphanistrum</i>	Yes	Yes
Ragweed, Giant	<i>Ambrosia trifida</i>	No	Yes
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	Yes	Yes
Speedwell, Field	<i>Veronica agrestis</i>	No	Yes

¹ Use higher rates on Marestail/Horseweed populations that are resistant to glyphosate.

APPLES, PEARS, STONE FRUIT AND NUT ORCHARDS (EXCEPT FILBERTS)

WEEDS IN CROPS	AMOUNT OF PANTHER DUO PER ACRE	DIRECTIONS
Annual broadleaf weeds	3 pints	For control of weeds on the orchard floor, apply using coarse sprays and low pressure in sufficient volume of water to obtain thorough wetting of weeds. Treat when weeds are small and actively growing.

RESTRICTIONS AND LIMITATIONS FOR USE IN APPLES, PEARS, STONE FRUIT AND NUT ORCHARDS (EXCEPT FILBERTS)

- Do not apply to bare ground as injury may result.
- Do not apply immediately before irrigation and withhold irrigation for 2 days before and for 3 days after treatment.
- Do not allow spray to drift onto or contact foliage, fruit, stems, trunks of trees or exposed roots as injury may result.
- Do not apply to newly established or young orchards. Trees must be at least 1 year old and in vigorous condition.
- Do not apply during bloom.
- Do not graze or feed cover crops from treated orchards.
- Do not make more than 2 applications per crop cycle. Maximum of 4.0 pints (2.0 lbs. 2,4-D ae) per acre per application.
- **(PHI)** Do not harvest apples and pears within 14 days of application, stone fruit within 40 days of application and nuts within 60 days of application.
- For apples, pears and stone fruits, allow at least 75 days between applications.
- For tree nuts, allow at least 60 days between applications.
- Do not cut orchard floor forage for hay within 7 days of application.

FILBERTS

WEEDS IN CROPS	AMOUNT OF PANTHER DUO PER ACRE	DIRECTIONS
Annual broadleaf weeds	2 pints	Apply a maximum of 2 pints (1.0 lb. 2,4-D ae) in 10 to 100 gallons of spray solution per acre.

RESTRICTIONS AND LIMITATIONS FOR USE IN FILBERTS

- Do not apply to bare ground as injury may result.
- Do not use on light sandy soil.
- Do not apply immediately before irrigation and withhold irrigation for 2 days before and for 3 days after treatment.
- Do not allow spray to drift onto or contact foliage, fruit, stems, trunks of trees or exposed roots as injury may result.
- Do not apply to newly established or young orchards. Trees must be at least 1 year old and in vigorous condition.
- Do not apply during bloom.
- Do not graze or feed cover crops from treated orchards.
- Do not make more than 4 applications per crop cycle. Maximum of 2.0 pints (1.0 lbs. 2,4-D ae) per acre per application.
- **(PHI)** Do not harvest filberts with 45 days of application.
- Allow at least 60 days between applications.
- Do not cut orchard floor forage for hay within 7 days of application.

[SUBPART 1]

**WINTER WHEAT
(Preplant to Crop)**

WEEDS IN CROPS	AMOUNT OF PANTHER DUO PER ACRE	DIRECTIONS
Preplant	2 pints	Apply by ground or air at a minimum of 30 days prior to planting winter wheat. See WINTER WHEAT ROTATIONAL RESTRICTIONS for restrictions.

RESTRICTIONS AND LIMITATIONS FOR USE ON WINTER WHEAT

- For aerial application on winter wheat, apply this product in 3 to 10 gallons of water per acre.
- For ground application a minimum of 10 to 15 gallons of water per acre is needed for proper spray coverage.
- Limit to 3.6 pints (1.75 lbs. 2,4-D ae) per acre.
- Do not graze until wheat has reached 5 inches in height.
- For preplant weed control, use only on no-till or minimum tillage fields where the previous year's crop residue has not been incorporated into the soil.
- Apply by ground or air 30 days prior to planting winter wheat.
- Do not use on Durum wheat.
- Do not irrigate between emergence and spike.
- Wheat must be planted a minimum of 1 inch deep.
- Do not graze until wheat has reached 5 inches in height.

WINTER WHEAT ROTATIONAL RESTRICTIONS

Wheat, as a rotational crop, may be planted after applying this product at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

See **ROTATION RESTRICTIONS, COTTON, FIELD CORN, SOYBEAN, or SUGARCANE** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER DUO HERBICIDE RATES	CROPS	ROTATION INTERVALS
1- 2 pt/A	Wheat	30 days ¹
Up to 3 pt/A	Wheat	2 months ¹
Up to 4 pt/A	Wheat	4 months
6 to 8 pt/A	Wheat	9 months

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

Burndown Use Directions

This product, applied as part of a burndown program at 2 to 3.6 pints per acre, may be used for residual weed control, as well as to assist in postemergence burndown of many weeds where wheat will be planted directly into the residue of the previous crop. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Refer to tank mix partner's label for recommended application pressure and recommended adjuvant systems.

[SUBPART 1]

**CORN
(Preplant to Crop)**

WEEDS IN CROP	AMOUNT OF PANTHER DUO PER ACRE	DIRECTIONS
CORN (Field corn) Preplant	1 to 2 pints	To control emerged broadleaf weed seedlings or existing cover crops prior to planting corn, apply 14 days before planting. Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth. Use high rate for less susceptible weeds or cover crops such as alfalfa. Corn can be planted 7 days after an application of 2 pints per acre if a minimum of 25% of the soil surface is covered with the residue of the preceding crop and a minimum of 1/4 inch of rainfall has occurred between application and planting.

CORN (FIELD CORN) RESTRICTIONS

Field Corn Restrictions

- Use only on no-till or minimum tillage fields where last year's crop residue has not been incorporated into the soil.
- Do not irrigate between emergence and 2-leaf corn
- Do not use on popcorn, sweet corn or corn grown for seed.
- Limited to one Preplant application per crop cycle.
 - Maximum of 2 pints (2.0 lbs. 2,4-D ae) per acre per crop cycle.

CORN (FIELD CORN) ROTATION RESTRICTIONS

Field Corn, as a rotational crop, may be planted after applying this product at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

See **ROTATION RESTRICTIONS, COTTON, SOYBEAN, SUGARCANE** or **WINTER WHEAT** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER DUO HERBICIDE RATES	CROPS	ROTATION INTERVALS
3/4- 1 pt/A	Field Corn (minimum and no-till)	7 days ¹
1- 2 pt/A	Field Corn (minimum and no-till)	15 days
	Field Corn (conventional tillage)	30 days ¹
Up to 3 pt/A	Field Corn (minimum and no-till)	15 days
	Field Corn (conventional tillage)	30 days ¹
Up to 4 pt/A	Field Corn	4 months
6 to 8 pt/A	Field Corn	9 months

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

TANK MIX RESTRICTIONS

Tank mixes with flufenacet (Axiom or Domain), metolachlor or s-metolachlor (Dual Magnum or Dual II Magnum), dimethenamid or dimethenamid-p (Frontier or Outlook), alachlor (Lasso), or acetochlor (Surpass or Harness) may result in injury to field corn when application is followed by prolonged periods of cool wet weather and should not be used with this product, unless supplemental labeling, provided by Nufarm, is followed.

**COTTON
(Preplant to Crop)**

Not currently registered for use in California.

	Amount of Panther Duo per Acre	Minimum Waiting Interval Before Planting Cotton	Directions
COTTON Preplant	2.0 pints	30 Days ¹	Apply to control actively growing emerged broadleaf weeds prior to planting cotton. For best performance, apply when weeds are in the 2-4 leaf stage and rosettes are less than 2" across.

COTTON RESTRICTIONS (PREPLANT)

- For use only preplant to cotton.
- Following application, a minimum accumulation of 1" rainfall or overhead irrigation followed by the specified minimum waiting

[SUBPART 1]

interval, is required before planting cotton.

- Do not apply more than 2.0 pints of this product per application per acre in one season prior to planting cotton.
- Do not apply more than 2 applications per year.
- Do not make a sequential application of this product within 30 days of the first application of this product.
- Do not apply this product prior to planting cotton if you are not prepared to accept the results of cotton injury including possible loss of stand and yield.
- Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D pre-plant use.
- Mowing or cultivating weeds prior to treatment with this product may result in poor weed control.
- Do not apply this product pre-plant to cotton in fields having a coarse-textured soil where the organic matter is less than 1%.
- Do not allow livestock to feed/graze on treated cover crops.
- Do not cut treated crop for feed, hay, forage, fodder or graze treated cotton to livestock.
- Do not make preplant applications of this product to cotton in geographic areas with average annual rainfall less than 25".

COTTON ROTATIONAL RESTRICTIONS

Cotton, as a rotational crop, may be planted after applying this product at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

See **ROTATION RESTRICTIONS, FIELD CORN, SOYBEAN, SUGARCANE** or **WINTER WHEAT** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER DUO HERBICIDE RATES	CROPS	ROTATION INTERVALS
1- 2 pt/A	Cotton	30 days ¹
Up to 3 pt/A	Cotton	2 months ¹
Up to 4 pt/A	Cotton	4 months
6 to 8 pt/A	Cotton	9 months

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

Notes:

- Refer to Table 1 to determine use rates for specific targeted weed species, but do not exceed rate stated for cotton preplant.
- For applications applied 75 or more days* before planting, follow the directions, restrictions and precautions in **FALLOW LAND AND CROP STUBBLE** section of the container label.

*Minimum waiting interval excludes days when ground is frozen.

HOPS

WEEDS IN CROPS	AMOUNT OF PANTHER DUO PER ACRE	DIRECTIONS
Annual broadleaf weeds	1 pint	Make directed applications to the row middles. Make up to 3 applications at 30-day intervals with the last application before harvest.

RESTRICTIONS AND LIMITATIONS FOR HOPS

- Limited to 3 applications per crop cycle.
- Maximum of 1 pint (0.5 lbs. 2,4-D ae) per acre per application.
- Maximum of 3 pints (1.5 lbs. 2,4-D ae) per acre per crop cycle.
- Minimum of 30 days between applications.
- **(PHI)** Do not harvest within 30 days of application.
- Do not use with an adjuvant.
- Do not allow spray to contact green stem, foliage, flowers or cones or unacceptable injury may occur.
- Do not mow or rake over treated areas, as dust created by mowing may drift onto sensitive crops or vegetation resulting in injury.

**SOYBEANS
(Preplant Only)**

WEEDS IN CROPS	AMOUNT OF PANTHER DUO PER ACRE	DIRECTIONS
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[SUBPART 1]

Soybean Preplant Weed Control	3/4 to 1 pint	Apply not less than 7 days prior to planting soybeans, when weeds are small and actively growing. Use the higher rate on larger weeds and when perennials are present.
	>1 to 2 pints	Apply not less than 15 days prior to planting soybeans, when weeds are actively growing.

In addition to those weeds found on the WEED LIST, this product will suppress or control the following broadleaf weeds frequently encountered in reduced tillage soybean production systems: alfalfa*, bullnettle, smallflowered bittercress, Carolina geranium, smallflowered buttercup, common and rough cinquefoil, red clover*, horseweed or marestalk, mousetail, wild mustard, field pennycress, cutleaf evening primrose, common purslane, speedwell, velvetleaf, and Virginia copperleaf. * These weeds are only partially controlled.

Apply no more than 2.0 pints of this product in one season prior to planting soybeans. After applying, plant soybean seed as deep as practical or at least 1-1/2 to 2 inches deep. Adjust the planter press wheel, if necessary, to ensure that planted seed is completely covered.

Applications of 2 pints per acre will provide residual control as described in the Table - **Broadleaf Weeds Controlled by Residual Activity of This Product.**

If desired, this product may be applied pre-plant to soybeans in tank mixtures with other herbicides such as Poast®, Poast Plus®, Roundup®, Roundup D-Pak®, Honcho®, Gramoxone Extra®, Prowl®, Pursuit Plus®, Scepter®, Scepter 70 DG, Squadron® and others that are registered for pre-plant soybean use.

Do not tank mix this product with acetochlor (Warrant®), alachlor (Micro-Tech®), flufenacet (Axiom®, Domain®), metolachlor (Dual® Magnum, Dual® II Magnum, Boundary®) or dimethenamid (Frontier® or Outlook®) within 15 days of planting soybeans, unless soybeans are planted under no-till or minimum tillage conditions on wheat stubble or no-till field corn stubble.

NOTE: Unacceptable injury to soybeans planted in fields previously treated with this product may occur and the extent of injury will depend on weather and agronomic factors such as the amount of weed vegetation and previous crop residue present that may be in effect between the time of application and the emergence of the soybean plant.

RESTRICTIONS AND LIMITATIONS FOR USE IN SOYBEANS (PREPLANT)

- Do not apply this product when weather conditions such as temperature, air inversions, or wind favor drift from treated areas to susceptible plants.
- Apply no more than 2.0 pints (1.0 lb. 2,4-D ae) of this product per acre in one season prior to planting soybeans.
- Only one application per growing season, regardless of the application rate used, is allowed.
- Do not apply this product prior to planting soybeans if you are not prepared to accept the results of soybean injury including possible loss of stand and yield.
- Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D pre-plant use.
- Do not mow or cultivate weeds prior to treating with this product as poor control may result.
- Do not apply this product pre-plant to soybeans in fields having a coarse-textured soil where the percent organic matter is <1.0%.
- Do not irrigate when soybeans are cracking.
- Do not graze treated fields or feed treated hay to livestock.

SOYBEAN ROTATIONAL RESTRICTIONS

Soybean, as a rotational crop, may be planted after applying this product at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

See **ROTATION RESTRICTIONS, COTTON, FIELD CORN, SUGARCANE or WINTER WHEAT** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER DUO HERBICIDE RATES	CROPS	ROTATION INTERVALS
3/4- 1 pt/A	Soybean	7 days ¹
1- 2 pt/A	Soybean	15 days
Up to 3 pt/A	Soybean	30 days ¹
Up to 4 pt/A	Soybean	4 months
6 to 8 pt/A	Soybean	9 months

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

This product will provide postemergence burndown of many annual and perennial weeds where soybeans will be planted directly into a stale seedbed, cover crop or in previous crop residues. For control of emerged weeds not on this label, choose the most appropriate tank mix partner from Table - **Tank Mix Partners for Control of Emerged Weeds in Reduced Tillage Soybeans.** This product may be applied with crop oil concentrate or methylated seed oil at 1 to 2 pints per acre or a non-ionic surfactant at 0.25% v/v to broaden the spectrum of activity and increase the speed of control.

[SUBPART 1]

Table - Tank Mix Partners for Control of Emerged Weeds in Reduced Tillage Soybeans

TANK MIX PARTNERS	TARGET WEEDS ¹
Paraquat	Annual Grasses
Glyphosate	Burndown

¹Refer to tank mix product labels for specific directions for control of emerged weeds present.

SUGARCANE

WEEDS IN CROP	AMOUNT OF WEEDAR® 64 PER ACRE	DIRECTIONS
Preemergence	4 pints	Apply from 2 weeks prior to planting to before canes appear for control of emerged broadleaf weeds. DO NOT USE IN CALIFORNIA.
Post Directed or Layby	1-1/2 to 4 pints	Apply after cane emerges and through lay-by. DO NOT USE IN CALIFORNIA.

RESTRICTIONS AND LIMITATIONS FOR USE IN SUGARCANE

- Do not apply more than a total of 8 pints (4.0 lb. 2,4-D ae) of this product to sugarcane per acre per growing season.
- Do not make a sequential application within 14 days of the first application.
- Do not apply within 90 days of harvest.
- **Preemergence:** Limited to 1 application per crop cycle. Maximum of 4 pints (2.0 lb. 2,4-D ae) per acre per application.
- **Post Directed or Layby:** Limited to 1 application per crop cycle. Maximum of 4 pints (2.0 lb. 2,4-D ae) per acre per application.

SUGARCANE ROTATIONAL RESTRICTIONS

Sugarcane, as a rotational crop, may be planted after applying this product at the listed rate.

See **ROTATION RESTRICTIONS, COTTON, FIELD CORN, SOYBEAN, or WINTER WHEAT** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER DUO HERBICIDE RATES	CROPS	ROTATION INTERVALS
1- 4 pt/A	Sugarcane	immediately

For control of emerged weeds not on this label, choose the most appropriate tank mix partner from Table - **Tank Mixes with This Product for Post-Directed or Layby Use in Sugarcane**. Apply this product **before the crop emerges**. Tank mixes of this product applied to assist in the control of emerged weeds may be applied with crop oil concentrate or methylated seed oil at 1 quart per acre or a non-ionic surfactant at 0.25% v/v to broaden the spectrum of activity and increase the speed of control. Some tank mix products, such as Credit 41 Extra or Roundup Original Max (glyphosate), may be formulated with a suitable adjuvant and do not require additional adjuvant.

Post-Directed — Postemergence to Sugarcane, Postemergence to Weeds

Post-directed applications should only be made to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height and has begun to joint. Post-directed applications should not be made to "PINEAPPLE" varieties. Post-directed applications to "PINEAPPLE" varieties or to upright varieties that have not exceeded 24 inches in height and have not begun to joint, may result in unacceptable crop injury. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Select the proper rate of this product based on weed spectrum and weed height from Table - **Broadleaf Weeds Controlled by Post-Directed or Layby Application of This Product**.

Layby — Postemergence to Sugarcane, Postemergence to Weeds

Layby applications can be made to upright and "PINEAPPLE" varieties after the sugarcane has exceeded 30 inches in height and the spray solution will not contact foliage above 6 inches from the base of the sugarcane. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Select the proper rate of this product based on weed spectrum and weed height from Table - **Broadleaf Weeds Controlled by Post-Directed or Layby Application of This Product**.

[SUBPART 1]

Table - Broadleaf Weeds Controlled by Post-Directed or Layby Application of This Product in Sugarcane

BROADLEAF WEED SPECIES		WEED HEIGHT (inches)	
COMMON NAME	SCIENTIFIC NAME	3 PINTS PER ACRE	4 PINTS PER ACRE
Bindweed, Field	<i>Convolvulus arvensis</i>	4	8
Carpetweed	<i>Mollugo verticillata</i>	4	4
Cocklebur, Common	<i>Xanthium strumarium</i>	4	4
Florida Beggarweed	<i>Desmodium tortuosum</i>	2	2
Hemp Sesbania	<i>Sesbania exaltata</i>	6	8
Jimsonweed	<i>Datura stramonium</i>	4	4
Lambsquarters, Common	<i>Chenopodium album</i>	4	4
Morningglories,			
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>	-	4
Ivyleaf	<i>Ipomoea hederacea</i>	4	4
Pitted	<i>Ipomoea lacunosa</i>	4	6
Red	<i>Ipomoea coccinea</i>	-	4
Tall	<i>Ipomoea purpurea</i>	2	4
Mustard, Wild	<i>Brassica kaber</i>	6	6
Pigweeds,			
Palmer Amaranth	<i>Amaranthus palmeri</i>	4	6
Redroot	<i>Amaranthus retroflexus</i>	4	6
Smooth	<i>Amaranthus hybridus</i>	4	6
Plantain, Broadleaf	<i>Plantago major</i>	6	6
Prickly Sida	<i>Sida spinosa</i>	4	6
Purslanes,			
Common	<i>Portulaca oleracea</i>	2	4
Rock	<i>Calandrinia</i> spp.	-	2
Ragweeds,			
Common	<i>Ambrosia artemisiifolia</i>	2	2
Giant	<i>Ambrosia trifida</i>	4	4
Rice Flatsedge	<i>Cyperus iria</i>	2	4
Sicklepod	<i>Senna obtusifolia</i>	4	4
Smartweeds,			
Ladysthumb	<i>Polygonum persicaria</i>	4	4
Pale	<i>Polygonum lapathifolium</i>	4	4
Pennsylvania	<i>Polygonum pennsylvanicum</i>	4	4
Spotted Spurge	<i>Euphorbia maculata</i>	4	4
Velvetleaf	<i>Abutilon theophrasti</i>	4	6
Venice Mallow	<i>Hibiscus trionum</i>	2	2
Waterhemp,			
Common	<i>Amaranthus rudis</i>	2	2
Tall	<i>Amaranthus tuberculatus</i>	2	2

Tank mixes of this product will only control the above ground portion of field bindweed. When permissible by label restrictions repeated applications will be needed to control regrowth.

TANK MIXES

This product may be tank mixed with the herbicides listed in Table - **Tank Mixes with This Product for Post-Directed or Layby Use in Sugarcane** for additional weed control in burndown, preemergence, post-directed and layby applications. Refer to tank mix partner's label for adjuvant recommendations.

[SUBPART 1]

Table - Tank Mixes with This Product for Post-Directed or Layby Use in Sugarcane

TANK MIX PARTNER ¹	TARGET WEEDS	BURNDOWN	POST-DIRECTED ²	LAYBY
Atrazine	Pigweeds Cocklebur	X	X	X
Asulox ³	Annual Grasses		X	X
Evik ⁴	Annual Grasses		X	X
Glyphosate ⁵	Annual and Perennial Weeds	X		X
Metribuzin ⁶	Broadleaf Panicum Goosegrass		X	X
Sempre [®]	Purple Nutsedge Yellow Nutsedge	X	X	X

¹ Refer to tank mix product labels for specific directions for control of emerged weeds present not listed in Table - **Broadleaf Weeds Controlled by Post-Directed or Layby Application of This Product.**

² Post-directed applications should only be made to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height. Post-directed applications should not be made to "PINEAPPLE" varieties. Post-directed applications to "PINEAPPLE" varieties or to upright varieties that have not exceeded 24 inches in height may result in unacceptable crop injury.

³ Apply to sugarcane at least 24 inches tall.

⁴ Apply before weeds are greater than 6 inches tall.

⁵ Glyphosate applications must be made with a hooded sprayer. Sugarcane must be at least 3 ft. tall. Contact with the sugarcane foliage by either the spray mixture or the treated weed foliage will result in sugarcane injury.

⁶ Refer to metribuzin label for restrictions based on soil type.

ADDITIONAL PREEMERGENCE BROADLEAF CONTROL

This product can be tank mixed with atrazine or diuron for additional preemergence broadleaf control.

ADDITIONAL PREEMERGENCE GRASS CONTROL

This product can be tank mixed with PROWL (or other pendimethalin products) for additional preemergence grass control provided sugarcane has not emerged.

[SUBPART 1]

FALLOW LAND AND CROP STUBBLE
Idle Land, Postharvest to Crops, or Between Crops

WEEDS	AMOUNT OF PANTHER DUO PER ACRE	DIRECTIONS
Annual broadleaf weeds	1 to 2 pints	Use the lower rate when weeds are small (2 to 3 inches tall) and actively growing. Use the higher rate on older and drought-stressed plants.
Biennial broadleaf weeds	2 to 4 pints	Spray when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks become apparent. The lower rate can be used in the spring during rosette stage. Use the highest rate in the fall or after flower stalks have developed.
Perennial broadleaf weeds	2 to 4 pints	Spray weed in the bud to bloom stage or while in good vegetative growth. Do not disturb treated areas for at least 2 weeks after treatment, or until tops are dead.
Wild garlic and onion in crop stubble	4 pints	Apply to new regrowth of wild garlic or onion which occurs in the fall following harvest of small grains, corn or grain sorghum.

RESTRICTIONS AND LIMITATIONS FOR USE IN FALLOW LAND AND CROP STUBBLE

- Limit to two applications per year.
- Maximum single rate application of 4 pints (2.0 lbs. 2,4-D ae) per acre.
- Maximum of 8 pints (4.0 lbs. 2,4-D ae) per acre per application.
- Minimum of 30 days between applications.
- See **Rotation Restrictions** section of label for planting intervals on crops without specific use directions on this label.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in original container in a dry, secured storage area. Keep container tightly closed when not in use. Store at temperature above 32°F. If allowed to freeze, warm to at least 40°F and remix before using. Freezing does not alter this product.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate ground water. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

[**Note to Reviewer:** The following statement will be included on all Final Printed Labels bearing multiple Container Disposal (Container Handling) statements] **NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "No refillable" or "Refillable" designation. Follow the container disposal [handling] instructions below that apply to your container type / size."

[**Note to Reviewer:** The bracketed section headers will be included when multiple container types / sizes are listed on the label.]

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Containers Larger than 5 Gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container Larger than 5 Gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY,

[SUBPART 1]

CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV061515)

NOTICE TO BUYER

Purchase of this material does not confer any rights under patents governing this product or the use thereof in countries outside of the United States.

Panther is a Trademark of Nufarm Americas Inc.
Credit is a Registered Trademark of Nufarm Americas Inc.
All other trademarks are the property of their respective owners.

[SUBPART 1]

Optional Marketing Claims:

Nufarm Grow a better tomorrow.
Grow a better tomorrow.

[SUBPART 2]

[PANTHER DUO HERBICIDE – NON-CROP]

[For use in Non-crop and Aquatic Market Segment]

GROUP 4 & 14 HERBICIDE

PANTHER™ DUO – NON-CROP HERBICIDE

Not Intended For Residential Use.

ACTIVE INGREDIENTS:

Flumioxazin*	2.53%
2,4-Dichlorophenoxyacetic acid**	38.87%

OTHER INGREDIENTS:	<u>58.60%</u>
TOTAL:	<u>100.00%</u>

*2-[7 -fluoro-3, 4-dihydro-3-oxo-4-(2-propynyl) -2H-1 • 4-benzoxazin-6-yl]-4.5.6. 7 -tetrahydro-1 H-isoindole-1.3(2H)-dione
Panther Duo contains 0.26 pounds flumioxazin per gallon.

**Contains 4.0 pounds per gallon 2,4-Dichlorophenoxyacetic acid.

Isomer specific by AOAC method No. 978.05

[For ≤ 5 Gallon Containers:] [Shake Well Before Use]
[For > 5 Gallon Containers:] [Shake Well, Agitate or Recirculate Before Use]

KEEP OUT OF REACH OF CHILDREN DANGER / PELIGRO

PRECAUCION AL USUARIO: Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO.71368-RRL
EPA EST. NO.

MANUFACTURED FOR
NUFARM, INC.
11901. S AUSTIN AVE.
ALSIP, IL 60803



NET CONTENTS:

[Designation as “NONREFILLABLE” or “REFILLABLE” for containers ≥ 5 GAL]

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER / PELIGRO**

Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

All applicators must wear:

- long-sleeved shirt and long pants,
- shoes and socks,
- chemical-resistant gloves, and
- protective eyewear (goggles, face shield or safety glasses).

All mixers, loaders, and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes and socks,
- chemical-resistant gloves,
- chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate, and
- protective eyewear (goggles, face shield or safety glasses).

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE (personal protective equipment) may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

USER SAFETY RECOMMENDATIONS	
Users Should:	<ul style="list-style-type: none"> • Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. • Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

FIRST AID	
IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.</p>

NOTE TO PHYSICIANS
<p>This product contains a phenoxy herbicidal chemical. There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient. Probable mucosal damage may contraindicate the use of gastric lavage. Overexposure to materials other than this product may have occurred.</p>

[SUBPART 2]

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, non-target plants and aquatic invertebrates.

For Terrestrial Uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff may be hazardous to non-target plants and aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

This pesticide is toxic to plants and should be used strictly in accordance with the drift and run-off precautions on this label in order to minimize off-site exposures.

For Aquatic Uses: Fish breathe dissolved oxygen in the water and decaying weeds also use oxygen. When treating continuous, dense weed masses, it may be appropriate to treat only part of the infestation at a time. For example, apply the product in lanes separated by untreated strips that can be treated after vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3 week period following treatment. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Waters having limited and less dense weed infestations may not require partial treatments.

Under some conditions this product may have a potential to run-off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, such as no till, limited till and contour plowing; these methods also reduce pesticide run-off. Use of vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where run-off could occur will minimize water run-off and is recommended.

This product contains a chemical with properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Do not treat irrigation ditches in areas where water will be used to overhead (sprinkler) irrigate susceptible crops especially grapes, tomatoes, tobacco, and cotton.

Do not apply this product directly to, or permit to drift onto cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers or other desirable crop or ornamental plants which are susceptible to 2,4-D herbicide. Do not apply near susceptible plants since very small quantities of the 2,4-D will cause severe injury during the growing or dormant periods. Crops contacted by this product sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction.

MIXING AND LOADING: Most cases of ground water contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of ground water supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent ground water contamination.

PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow to come in contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: coveralls, chemical-resistant gloves made of any waterproof material, shoes plus socks, protective eyewear.

[SUBPART 2]

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

USE RESTRICTIONS

Do not apply this product through any type of irrigation system. Do not use in or near a greenhouse. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Read and follow all directions, restrictions and precautions on this label and on the labels of any products for which a tank mixture is being considered.

PRODUCT INFORMATION

Be sure that use of this product conforms to all applicable laws, rules and regulations. Certain states have restrictions pertaining to application distances from susceptible crops. The applicator should become familiar with these laws, rules or regulations and follow them exactly.

MIXING INSTRUCTIONS

Add about one-half the water to the mixing tank, then add this product with agitation and finally the rest of water with continuing agitation.

NOTE: Adding oil, wetting agent, or other surfactants to the spray may increase effectiveness on weeds but also may reduce selectivity to crops, resulting in crop damage.

COMPATIBILITY

If this product is to be tank mixed with fertilizers or with other pesticides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 quart) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5 to 15 minutes after mixing.

APPLICATION PROCEDURES

Apply by air or ground equipment in sufficient gallonage to obtain adequate coverage, except as otherwise directed on this label. Use 2 or more gallons of water per acre for aerial application and 10 or more gallons of water per acre for ground application.

RESISTANCE MANAGEMENT

This product contains active ingredients in Groups 4 and 14. Any weed population may contain or develop plants that are resistant to this product and other Group 4 and 14 herbicides. Weed species with acquired resistance to Group 4 and 14 herbicides may eventually dominate the weed population if Group 4 and 14 herbicides are used repeatedly in the same application area or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by this product or other Group 4 and 14 herbicides.

To delay or prevent herbicide resistance consider the following practices:

- Avoid the use of more than two consecutive applications of this product or other herbicides that have a similar target site of action.
- Alternate herbicides used for weed control.
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitor treated weed populations for loss of efficacy.
- Contact your local extension specialist, other experts appropriate to aquatic use, and/or manufacturer for resistance and/or integrated weed management practices.

For further information or to report suspected resistance, you may contact Nufarm Inc. at the following toll-free number: 800-345-3330.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

When applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

[SUBPART 2]

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

AERIAL APPLICATION

To obtain satisfactory weed control, aerial application of this product, must provide uniform coverage of surface weeds and sufficient contact time. When applied by air, this product may not provide adequate control of some submersed weeds. Do not apply by air when significant drift on to non-target plants may occur or when wind velocity is more than 10 mph. Avoid spraying this product within 200 feet of dwellings, adjacent sensitive crops or environmentally sensitive areas. To obtain satisfactory application and avoid drift, the following directions must be observed:

Volume and Pressure

Apply this product in a minimum of 5 gals of water per acre with a maximum spray pressure of 40 PSI. Application at less than 5 gals per acre may not provide adequate weed control. Higher gallonage applications generally provide more consistent weed control.

Nozzles and Nozzle Operation

Use nozzles that produce flat or hollow cone spray patterns. Use non-drip type nozzles such as diaphragm type nozzles to avoid unwanted discharge of spray solution. The nozzle must be directed toward the rear of the aircraft, at an angle between 0° and 15° downward. Do not place nozzles on the outer 25% of the wings or rotors.

Adjuvants

Refer to the additive section or the tank mix partners label for adjuvant recommendation.

Sprayer Cleanup

If spray equipment is dedicated to application of IVM and aquatic herbicides, the following steps are recommended to clean the spray equipment:

- Completely drain the spray tank and rinse the application equipment thoroughly, including the inside and outside of the tank and all in-line screens.

If spray equipment will be used for purposes other than applying IVM and aquatic herbicides, it must be thoroughly cleaned following application of this product. The following steps must be used to clean the spray equipment:

1. Completely drain the spray tank and rinse the application equipment thoroughly, including the inside and outside of the tank and all in-line screens.
2. Fill the tank with clean water and flush all hoses, booms, screens and nozzles.
3. Top off tank with clean water.
4. Circulate through sprayer for 5 minutes.
5. Then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes.
6. Drain tank completely.
7. Remove all nozzles and screens and rinse them with clean water.

[SUBPART 2]

BARE GROUND AND NON-CROP AREAS

This product contains a combination of flumioxazin and 2,4-D and when applied as directed, will provide preemergence and postemergence control of problem weeds in noncrop areas.

This product, when used as directed, can be used for non-selective vegetation control to maintain bare ground non-crop areas that must be kept weed-free. Apply this product only to:

- Bare ground under guard rails, above-ground pipelines, and railroad beds, railroad yards and surrounding areas
- Bare ground in parking and storage areas, plant sites, substations, pumping stations, and tank farms
- Bare ground areas of airports, brick yards, industrial plant sites, lumber yards, military installations, and storage areas
- Bare ground around farm buildings, and along ungrazed fence rows, wind breaks and shelter belts
- Road surfaces, improved roadside areas and gravel shoulders.

Follow all applicable directions as outlined above under Information. See Table – **Weeds Controlled by Preemergence Application** for a list of broadleaf weeds and grasses controlled by this product.

This product offers residual and postemergence control of susceptible broadleaf and grass weeds as well as additional mode of action to assist in the control of ALS (acetolactate synthase) resistant weeds. The length of residual control is dependent on the rate applied as well as on rainfall and temperature conditions. Length of residual control will decrease as temperature and precipitation increase.

When applying this product after weed emergence, mix with an agronomically approved adjuvant. A crop oil concentrate which contains at least 15% emulsifiers and 80% oil or a non-ionic surfactant containing at least 80% active ingredient should be used when applying this product as part of a postemergence weed control program. Mixing compatibility should be verified by a jar test before using.

Fencerows, Hedgerows, Roadsides, Ditches, Right-of-Way, Utility Power Lines, Railroads and Industrial Sites

WEEDS	AMOUNT OF PANTHER DUO PER ACRE	DIRECTIONS
Annual broadleaf weeds	4 pints	Treat when weeds are young and actively growing. Perennial weeds should be near the bud stage, but not flowering at application. Do not use on susceptible southern grasses such as St. Augustine. Do not apply to newly seeded areas until grass is well established. Bentgrass, clover, legumes and dichondra may be injured by this treatment.
Biennial and perennial broadleaf		
Woody plants	8 pints	

RESTRICTIONS AND LIMITATIONS FOR USE ON BAREGROUND AND NON-CROP AREAS

- Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

Post-emergence (annual and perennial weeds):

- Limited to 2 applications per year.
- Maximum of 4.0 pints of product (2.0 lbs 2,4-D ae) per acre per application.
- Minimum of 30 days between applications.

Post-emergence (woody plants):

- Limited to 1 application per year.
- Maximum of 8.0 pints of product (4.0 lbs 2,4-D ae) per acre per year.

AERIAL APPLICATION

- Aerial applications are limited to maintaining weed free railroad beds, railroad yards and surrounding areas and military installations.

SPOT TREATMENT IN NON-CROP AREAS

Mix 2 to 3 fluid ounces of this product in 3 gallons of water. Wet all weeds and stems thoroughly. For best results, treat when weeds are actively growing.

[SUBPART 2]

For Spot Treatment applications, do not exceed 8 pints of product (4.0 lbs 2,4-D ae) per acre per year.

TANK MIX APPLICATION

In addition to weeds controlled by this product used alone, tank mixtures with other preemergence and postemergence herbicides registered for use in non-crop areas provide a broader spectrum of weed control. This product must be tank mixed with other non-crop herbicides including, but not limited to those products listed below.

TANK MIX COMBINATIONS FOR NON-SELECTIVE VEGETATION CONTROL

bromacil	imazapic	pramitol
chlorsulfuron	imazapyr	prodiamine
dicamba	metsulfuron-methyl	simazine
diuron	norflurazon	sulfometuron-methyl
chlorpyralid	oryzalin	tebuthiuron
glyphosate	pendimethalin	triclopyr
hexazinon	picloram	

IMPORTANT: Completely read and follow the label of any potential tank mix partner. When using tank mixtures, use conditions must be in accordance with the most restrictive of the label restrictions, limitations and precautions on either herbicide label.

WEED LIST

Table - Weeds Controlled by Postemergence Activity of This Product

Annual and Biennial Weeds

Beggarticks*	Mallow* (venice or little)	Rough fleabane
Bullthistle	Marshelder	Russian thistle*
Coffeeweed	Marestail / Horseweed	Salsify (western or common)
Common cocklebur	Morningglory	Shepherd's purse
Common burdock	(common, ivy, woolly)	Smartweeds* (annual species)
Cutleaf eveningprimrose	Musk thistle* (***)	Sowthistle (annual or spiny)
Common lambsquarters	Mustards (except blue mustard)	Sunflower
Hairy galinsoga	Pepper weeds (except perennial)	Vervains*
Henbit	Pigweeds** (Amaranthus spp.)	Vetches
Jimsonweed	Prickly lettuce	Wild carrot
Knotweed*	Purple deadnettle	Wild lettuce
	Ragweed (common or giant)	Wild parsnips

Perennial Weeds

Bindweed* (hedge, field, European)	Goldenrod*	Orange hawkweed*
Blue lettuce	Healall	Plantains
Canada thistle*	Ground ivy*	Sowthistle (perennial)
Catnip	Hoary cress*	Vervains*
Chicory	Ironweed*	Wild garlic*
Dandelion Docks*	Jerusalem artichoke	Wild onion*
Dogbane*	Many flowered aster	
	Nettles* (including stinging)	

*These species may require repeated applications, when permissible by label restrictions, and/or use of the higher rate on this product label even under ideal conditions for application.

**Control of pigweeds in the High Plains area of Texas and Oklahoma may not be satisfactory with this product.

***Not registered for control of musk thistle in California.

When this product is applied preemergence or postemergence at labeled rates and weed stages, the following grasses and broadleaf weeds are controlled:

[SUBPART 2]

TABLE - WEEDS CONTROLLED BY PREEMERGENCE APPLICATION

COMMON NAME	SCIENTIFIC NAME
Alyssum, Hoary	<i>Berteroa incana</i>
Amaranth	
Palmer	<i>Amaranthus palmeri</i>
Spiny	<i>Amaranthus spinosus</i>
Barnyardgrass*	<i>Echinochloa crus-galli</i>
Beggarweed, Florida	<i>Desmodium Tortuosum</i>
Bittercress, Hairy	<i>Cardamine hirsute</i>
Bluegrass, Annual*	<i>Poa annua</i>
Burclover, California	<i>Medicago Polymorpha</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed	
Common	<i>Stellaria media</i>
Mouseear	<i>Cerastium vulgatum</i>
Crabgrass	
Large*	<i>Digitaria sanguinalis</i>
Smooth*	<i>Digitaria ishaemum</i>
Southern*	<i>Digitaria ciliaris</i>
Croton, Tropic	<i>Croton glandulosus var.septentrionalis</i>
Dandelion*	<i>Taraxacum officinale</i>
Donfennel	<i>Eupatorium capillifolium</i>
Eclipta	<i>Eclipta prostrate</i>
Foxtail	
Bristly*	<i>Setaria verticillata</i>
Giant*	<i>Setaria faberi</i>
Green*	<i>Setaria viridis</i>
Yellow*	<i>Setaria glauca</i>
Galinsoga, Hairy	<i>Galinsoga ciliata</i>
Geranium, Carolina	<i>Geranium carolinianum</i>
Goosegrass*	<i>Eleusine indica</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Horseweed*	<i>Conyza Canadensis</i>
Indigo, Hairy	<i>Indigofera hirsuta</i>
Ivy, Ground*	<i>Glechoma hederacea</i>
Jimsonweed	<i>Datura stramonium</i>
Kochia	<i>Kochia scoparia</i>
Kochia	<i>Kochia scoparia</i>
Kyllinga, Green*	<i>Kyllinga brevifolia</i>
Ladysthumb	<i>Polygonum persicaria</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Lovegrass, California*	<i>Eragrostis diffusa</i>
Mallow	
Common	<i>Malva neglecta</i>
Little	<i>Malva parviflora</i>
Venice	<i>Hibiscus trionum</i>
Mayweed*	<i>Anthemis cotula</i>
Morningglory	

[SUBPART 2]

Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>
Ivyleaf	<i>Ipomoea hederacea</i>
Red/Scarlet	<i>Ipomoea coccinea</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Tall	<i>Ipomoea purpurea</i>
Moss	<i>Bryum</i> spp.
Mustard	
Tumble	<i>Sisymbrium altissimum</i>
Wild	<i>Brassica kaber</i>
Nightshade	
Black	<i>Solanum nigrum</i>
Eastern Black	<i>Solanum ptycanthum</i>
Hairy	<i>Solanum sarrachoides</i>
Panicum	
Fall*	<i>Panicum dichotomiflorum</i>
Texas*	<i>Panicum texanum</i>
Parsley-Peirt	<i>Alchemilla arvensis</i>
Pearlwork, Birdseye*	<i>Sagina procumbens</i>
Pennycress, Field	<i>Thlaspi arvense</i>
Phyllanthus, Longstalked	<i>Phyllanthus tenellus</i>
Pigweed	
Prostrate	<i>Amaranthus blitoides</i>
Redroot	<i>Amaranthus retroflexus</i>
Smooth	<i>Amaranthus hybridus</i>
Tumble	<i>Amaranthus albus</i>
Pineapple-weed*	<i>Matricaria matricarioides</i>
Plantain	
Broadleaf*	<i>Plantago major</i>
Buckhorn*	<i>Plantago lanceolata</i>
Poinsettia, Wild	<i>Euphorbia heterophylla</i>
Pondweed, Sago	<i>Potamogeton pectinatus</i>
Puncturevine	<i>Tribulus terrestris</i>
Purslane, Common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed	
Common	<i>Ambrosia artemisiifolia</i>
Giant	<i>Ambrosia trifida</i>
Redmaids	<i>Calandrinia ciliata</i>
Redweed	<i>Melochia corchorifolia</i>
Rocket, Yellow	<i>Barbarea vulgaris</i>
Senna, Coffee	<i>Cassia occidentalis</i>
Sesbania, Hemp	<i>Sesbania exaltata</i>
Shepherd's-Purse	<i>Capsella bursa-pastoris</i>
Sida, Prickly (Teaweed)	<i>Sida spinosa</i>
Signalgrass*	<i>Brachiaria platyphylla</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>
Spurge	
Prostrate	<i>Euphorbia humistrata</i> Engelm
Spotted	<i>Euphorbia maculata</i>

[SUBPART 2]

Starbur, Bristly*	<i>Acanthospermum hispidum</i>
Thistle	
Canada*	<i>Cirsium arvense</i>
Russian	<i>Salsola iberica</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Waterhemp	
Common	<i>Amaranthus rudis</i>
Tall	<i>Amaranthus tuberculatus</i>
Woodsorrel, Yellow*	<i>Oxalis stricta</i>

*Preemergence control only

DIRECTIONS FOR USE ON DORMANT WARM-SEASON TURFGRASS GROWN ON GOLF COURSES, SOD PRODUCTION AND SIMILAR AREAS Not Intended for Residential Use

[Only for use in the following states: Alabama, Arizona, Arkansas, California, Colorado, Delaware, Florida, Georgia, Iowa, Indiana, Illinois, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Nebraska, Nevada, New Mexico, New Jersey, North Carolina, Oklahoma, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia and West Virginia]

This product may be applied as a single or split application to well established dormant Bermudagrass, and will control winter annual weeds found in Table – **Weeds Controlled by Preemergence Application**. Apply this product to dormant Bermudagrass in such areas as apartment complexes, golf courses, sod farms, roadsides, sports fields, campgrounds, office complexes, parks, parking areas, recreational sites, schools and other similar sites. Dormant Bermudagrass has exhibited tolerance to this product only when applied after turf has become dormant in the late fall and before turf breaks dormancy in the late winter/early spring. Application of this product to actively growing turfgrass (warm season and cool season) or during green-up will cause unacceptable injury. This product will injure warm season turf grown in southern areas where grass does not become completely dormant.

BROADCAST APPLICATIONS

Apply 1/2 to 3/4 pints of this product per broadcast acre as a preemergence (to weed emergence) application. If weeds are present at the time of application apply this product plus an adjuvant (0.25% v/v non-ionic surfactant). Make postemergence (to weed emergence) applications of this product when weeds are actively growing and no larger than 2 inches in height. Thorough spray coverage is necessary to maximize the postemergence activity of this product. When applied after weed germination, this product will provide preemergence and postemergence control of broadleaf weeds and grasses listed in Table – **Weeds Controlled by Preemergence Application**. Postemergence control of this product may be more effective on certain weed species, and may not control mature, stressed or hardened off weeds that are not actively growing at the time of application.

A second application of this product may be required to provide adequate season-long weed control. Apply the second application using the above mentioned rate guidelines prior to the turfgrass breaking spring dormancy.

SPOT TREATMENTS

Mix 0.42 fluid ounces (2 1/2 tsp) of this product and 2 tsp (1/3 fl oz) of non-ionic surfactant in one gal of water and apply one gal of spray solution per 1,000 sq ft. Occasionally shake the spray solution while spraying to ensure the spray solution remains well mixed. Spray the target weeds until the leaves are wet.

TANK MIXING WITH OTHER TURFGRASS HERBICIDES

Tank mixing this product with other preemergence and postemergence herbicides registered for use in dormant turfgrass may provide a broader spectrum of weed control than this product alone.

IMPORTANT: Turfgrass must be completely dormant at application. Any turfgrass that is not dormant will be injured by applications of this product. Scout area to be sprayed for any turf that is green in color and if encountered, delay application until turfgrass is completely dormant. Read and follow the label of any herbicides mixed with this product. When tank mixing this product with other herbicides, always follow the most restrictive restrictions, limitations and precautions on the label of any tank mix partner.

USE PRECAUTIONS

Exercise good judgment and caution when applying to dormant turfgrass until familiarity is gained with this product.

USE AROUND BENTGRASS AND POA GREENS

This herbicide has limited potential for lateral movement on level terrain, but can potentially move down slope after excessive rainfall and affect sensitive turf species such as bentgrass and *Poa trivialis*. When applied upslope from bentgrass greens or Bermudagrass greens overseeded with *Poa trivialis*, allow an adequate buffer zone between greens and the treated area. If uncertain about the size of the buffer, 15 feet is suggested.

Risk of movement is decreased when this herbicide is applied to soil at less than field capacity. Avoid application when heavy rain is

[SUBPART 2]

imminent or when the soil is saturated.

RESTRICTIONS AND LIMITATIONS

- Do not apply to golf course putting greens.
- Do not apply to warm season turfgrass that has been overseeded with cool season turfgrass (ex. perennial ryegrass).
- Do not irrigate within 1 hour before or after application.
- Do not apply if rain is expected within 1 hour after application.
- Do not mow turfgrass within 12 hours after application.
- Do not apply within 30 days prior to cutting or lifting sod.
- Do not apply more than 2 applications at 3/4 pints per acre per year.
- Do not re-apply this product within 30 days.
- Do not apply in fall before turfgrass has ceased active growth or in late winter/ early spring after turfgrass has resumed active growth.
- Allow 8 weeks between application and seeding or sodding of turfgrass.

Table - TOLERANT TURFGRASS SPECIES

COMMON NAME	SCIENTIFIC NAME
Bermudagrass	<i>Cynodon</i> spp.

AQUATIC WEED CONTROL

For Use in Ponds, Lakes, Reservoirs, Marshes, Bayous, Drainage Ditches and Non-Irrigation Canals that are Quiescent or Slow Moving

NOTICE TO APPLICATORS

State and Local Coordination

Before application, coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for such use.

Wind Velocity - Ground or Surface Application: Do not apply when wind speeds are at or above 10 mph. **Air Application:** Do not apply when wind speeds are at or above 5 mph. The restrictions do not apply to subsurface applications used in weed control programs.

RESTRICTIONS – AQUATIC WEED CONTROL:

- Do not apply to intertidal or estuarine areas
- Do not use in water utilized for crayfish farming
- Do not use on small canals with a flow rate less than 10 cubic feet per second (CFS) where water will be used for drinking purposes.
- In areas with dense weed vegetation only treat 1/2 the water body at one time and wait 10-14 days before treating the remaining area. Do not retreat the same section of water within 28 days of application.
- Treated water may not be used for irrigation purposes on food crops until at least five (5) days after application.

TO CONTROL FLOATING AND EMERGED WEEDS USING SURFACE APPLICATION

This product will control weeds and algae listed in Table - **Floating and Emerged Weeds** when applied as a broadcast spray with appropriate equipment. For best results, apply this product to the foliage of actively growing weeds.

Apply to emergent aquatic weeds in ponds, lakes, reservoirs, marshes, bayous, drainage ditches and non-irrigation canals that are quiescent or slow moving. Coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for aquatic applications.

RESTRICTIONS - FLOATING AND EMERGED WEEDS:

- Maximum of 8 pints (4 lbs. ae 2,4-D) per surface acre per application.
- Limited to 2 applications per season.
- Minimum of 28 days between applications.
- Spot treatments are permitted.

Table - Floating and Emerged Weeds

Common Name	Scientific Name
Alligator Weed	<i>Alternanthera philoxeroides</i>
Frog's-bit	<i>Limnobium spongia</i>
Water Fern	<i>Salvinia</i> spp.
Water Hyacinth	<i>Eichornia crasipe</i>
Water Lettuce	<i>Pistia stratiotes</i>
Water Pennywort	<i>Hydrocotyle</i> spp.
Filamentous algae	<i>Pithophara</i>
Filamentous algae	<i>Cladophora</i>

[SUBPART 2]

Apply this product in a minimum of 30 gals of water per acre to all areas of the water body where weeds exist. Coverage is essential for effective control as all floating weeds need to be exposed to lethal concentrations in all parts of the water body. Any untreated escapes or re-introductions of plants that were not treated will reestablish in areas where surface weeds had previously been controlled. If a second application is required to provide control, a treatment may be made once the return of these weeds is first observed, but no sooner than 28 days after the last treatment.

Application of this product during early morning hours may enhance weed control. When applying to densely packed actively growing surface weeds, ensure adequate coverage. Rapid decomposition of vegetation resulting from herbicide treatment can result in loss of oxygen in water. A sudden decrease in dissolved oxygen can result in fish suffocation. If aquatic vegetation is dense, treat floating surface weeds in sections to avoid a rapid decrease in dissolved oxygen.

This product may be tank mixed with diquat, glyphosate or other registered foliar applied herbicides for enhanced control of floating and emergent weeds.

Consult a manufacturer's label for specific rate restrictions and weeds controlled. Always follow the most restrictive label restrictions and precautions for all products used when making an applications involving tank mixes.

Application Equipment

Apply this product with sprayers equipped with nozzles designed to deliver the desired spray pressure and spray volume. Apply by backpack or handgun sprayer, airboat, helicopter, airplane or other application equipment that will ensure thorough coverage of target plant foliage.

ADDITIVES

When applying this product to the foliage of floating or emerged aquatic weeds, mix with an adjuvant approved for use in aquatic sites. Mix this product with a non-ionic surfactant containing at least 80% active ingredient. Follow adjuvant manufacturer's label rates. Mixing compatibility should be verified by a jar test before using.

Information on water hyacinth (*Eichornia crasipe*) control

This product will control water hyacinth with surface and air applications.

Amounts to Use: 2 to 4 quarts (4 lb. acid equivalent per gallon) per acre. **Spray the weed mass only.** Use 4 quarts when plants are matured or when the weed mass is dense.

When To Apply: Spray when water hyacinth plants are actively growing. Repeat as necessary to kill regrowth and hyacinth plants missed in the previous operation.

How To Use - Surface Application: Use power sprayers operated with a boom or spray gun mounted on a boat, tractor or truck. Thorough wetting of foliage is essential for maximum control. Use 100 to 400 gal. per acre of spray mixture. Special precautions such as the use of low pressure, large nozzles and thickening agents should be taken to avoid spray drift in areas of sensitive crops. For DIRECTA-SPRATM operation use this product with 1 pint of drift control agent in 50 to 100 gallons of water. For other applications, follow the drift control agent label for mixing directions.

Air Application: Use drift control spray equipment or thickening agents mixed into the spray solution. Apply 1.0 gallon per acre of this product through standard boom systems with a minimum of 5 gallons of spray mix per acre. For MICROFOIL[®] drift control spray systems, apply this product in 12 to 15 gallons spray mix per acre.

2,4-D Acid Equivalent	1/2 pound	1 pound	2 pounds	3 pounds	4 pounds
Panther Duo	1 pint	2 pints	2 quarts	3 quarts	4 quarts

WATER USE FOLLOWING SURFACE APPLICATION

1. Water for irrigation or sprays:

- A. If treated water is intended to be used only for crops or non-crop areas that are labeled for direct treatment with 2,4-D such as pastures, turf, or cereal grains, the treated water may not be used until at least five (5) days after application.
- B. Due to potential phytotoxicity considerations, the following restrictions are applicable:
If treated water is intended to be used to irrigate or mix sprays for plants grown in commercial nurseries and greenhouses; and other plants or crops that are not labeled for direct treatment with 2,4-D, the water must not be used unless one of the following restrictions has been observed:
 - i. A setback distance from functional water intake(s) of greater than or equal to 600 ft. was used for the application, or,
 - ii. A waiting period of 7 days from the time of application has elapsed, or,
 - iii. An approved assay indicates that the 2,4-D concentration is 100 ppb (0.1 ppm) or less at the water intake. Wait at least 3 days after application before initial sampling at water intake.

2. Drinking water (potable water):

- A. Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits. The potable water use restrictions on this label are to ensure that consumption of water by the public is allowed only when the concentration of 2,4-D in the water is less than the MCL (Maximum Contaminant Level) of 70 ppb. Applicators should consider the unique characteristics of the treated waters to assure that 2,4-D concentrations in potable water do not exceed 70 ppb at the time of consumption.
- B. For floating and emergent weed applications, the drinking water setback distance from functioning potable water intakes is greater than or equal to 600 ft.
- C. If no setback distance of greater than or equal to 600 ft. is used for application, applicators or the authorizing organization must

[SUBPART 2]

provide a drinking water notification prior to a 2,4-D application to the party responsible for public water supply or to individual private water users. Notification to the party responsible for a public water supply or to individual private water users must be done in a manner to assure that the party is aware of the water use restrictions when this product is applied to potable water. The following is an example of a notification via posting, but other methods of notification which convey the above restrictions may be used and may be required in some cases under State or local law or as a condition of a permit.

Example: Posting notification should be located every 250 feet including the shoreline of the treated area and up to 250 feet of shoreline past the application site to include immediate public access points. Posting must include the day and time of application. Posting may be removed if analysis of a sample collected at the intake 3 or more days following application shows that the concentration in the water is less than 70 ppb (100 ppb for irrigation or sprays), or after 7 days following application, whichever occurs first.

Text of notification: Wait 7 days before diverting functioning surface water intakes from the treated aquatic site to use as drinking water, irrigation, or sprays, unless water at functioning drinking water intakes is tested at least 3 days after application and is demonstrated by assay to contain no more than 70 ppb 2,4-D (100 ppb for irrigation or sprays).

Application Date: _____ Time: _____ .

- D. Following each application of this product, treated water must not be used for drinking water unless one of the following restrictions has been observed:
 - i. A setback distance from functional water intake(s) of greater than or equal to 600 ft. was used for the application, or
 - ii. A waiting period of 7 days from the time of application has elapsed, or,
 - iii. An approved assay indicates that the 2,4-D concentration is 70 ppb (0.07 ppm) or less at the water intake. Sampling for drinking water analysis should occur no sooner than 3 days after 2,4-D application. Analysis of samples must be completed by a laboratory that is certified under the Safe Drinking Water Act to perform drinking water analysis using a currently approved version of analytical Method Number 515, 555, other methods for 2,4-D as may be listed in Title 40 CFR, Part 141.24, or Method Number 4015 (immunoassay of 2,4-D) from U.S. EPA Test Methods for Evaluating Solid Waste SW-846.
 - E. Note: Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intakes.
 - F. Drinking water setback distances do not apply to terrestrial applications of 2,4-D adjacent to water bodies with potable water intakes.
3. Except as stated above, there are no restrictions on using water from treated areas for swimming, fishing, watering livestock or domestic purposes.

TO CONTROL SUBMERSED AND FLOATING WEEDS USING SUBSURFACE APPLICATIONS

This product will control submersed and floating weeds listed in Table - **Submersed and Floating Weeds Controlled by Subsurface Application**, when applied subsurface with appropriate equipment.

RESTRICTIONS - SUBMERSED AQUATIC WEEDS:

- Maximum of 22.7 pints (10.8 lbs. ae) per acre-foot per application.
- Limited to 2 applications per season.

Table - Submersed and Floating Weeds Controlled by Subsurface Application

Common Name	Scientific Name
Coontail	<i>Ceratophyllum demersum</i>
Duckweed	<i>Lemna</i> spp.
Fanwort	<i>Cabomba caroliniana</i>
Hydrilla	<i>Hydrilla verticillata</i>
Hygrophila	<i>Hygrophila polysperma</i>
Naiad, Southern	<i>Najas guadalupensis</i>
Pondweed, Curlyleaf	<i>Potamogeton crispus</i>
Pondweed, Sago	<i>Potamogeton pectinatus</i>
Pondweed, Variable-Leaf	<i>Potamogeton diversifolius</i>
Water Fern	<i>Salvinia</i> spp.
Water Lettuce	<i>Pistia stratiotes</i>
Watermeal	<i>Wolffia</i> spp.
Watermilfoil, Eurasian	<i>Myriophyllum spicatum</i>
Watermilfoil, Variable-Leaf	<i>Myriophyllum heterophyllum</i>

Apply to aquatic weeds in ponds, lakes, reservoirs, marshes, bayous, drainage ditches and non-irrigation canals that are quiescent or slow moving. Do not apply within 28 days of previous application. Coordination and approval of local and State authorities may be required, either by letter of agreement or issuance of special permits for such use.

When applying this product to densely packed actively growing submersed weeds, a rapid decomposition of vegetation resulting from herbicide treatment can result in loss of oxygen in water. A sudden decrease in dissolved oxygen can result in fish suffocation. If aquatic vegetation is dense, treat submersed weeds in sections to avoid a rapid decrease in dissolved oxygen.

[SUBPART 2]

This product may be tank mixed with other registered submersed applied herbicides for enhanced control of submersed and floating weeds.

This product is rapidly absorbed by target plants, but also breaks down quickly in water with a pH greater than 8.5. The pH of water surrounding mats of submersed vegetation can exceed 8.5 by early to mid-day, due to photosynthetic processes. Application of this product under these conditions may provide only partial weed control, and regrowth is likely. For best control, apply this product in a minimum of 30 gals of water per acre in the early morning to actively growing weeds and early in the season before surface matting occurs. Complete coverage and sufficient contact time of submersed weeds with this product is required for optimal performance. Application of this product with subsurface trailing hoses designed to distribute the herbicide within the plant stand will provide more effective and longer term control of submersed weeds. Use Table – **Amount of Product to Apply for a Target Subsurface Concentration** to determine the amount of this product needed to achieve desired concentration at different water depths. Use higher concentrations when weed biomass is heavy and/or weeds are more mature and topped out. Any untreated plants that are left in the water column can re-infest treated areas that had previously been controlled. If a second application is required to provide control, a treatment may be made once the return of these weeds is first observed, but no sooner than 28 days after the last treatment.

Application Equipment

To improve distribution in the water column and ensure adequate coverage apply this product with subsurface trailing hoses in order to place the herbicide under the surface and throughout the biomass of aquatic vegetation. Keep swath width to a minimum in order to maximize contact with submersed aquatic vegetation.

Information on Hydrilla Control in Florida

This product should be applied as a subsurface treatment for hydrilla control. For best control of hydrilla apply during the late Winter/early Spring and/or early to late Fall. Efficacy of this product will be enhanced at these timings due to lower potential biomass present and lower pH of the water. If applied to mature topped out hydrilla, this product will cause some discoloration and loss of growing tips, but regrowth will be rapid. Tank mixing this product with other registered herbicides is recommended, especially if hydrilla is approaching maturity or biomass is heavy.

SURFACE AREA	Average Depth	For Typical Conditions 2 ppm Quarts Panther Duo	For Difficult Conditions* 4 ppm Quarts Panther Duo
1 Acre	1 ft.	5.2 qts	10.25 qts
	2 ft.	10.25 qts	20.5 qts
	3 ft.	15.4 qts	30.75 qts
	4ft.	20.5 qts	40.2 qts
	5 ft.	25.7 qts	51.3 qts

* Examples include spot treatment of pioneer colonies of Eurasian Water-milfoil and certain difficult to control aquatic species.

Information on watermilfoil (*Myriophyllum spicatum*) control

This product will control watermilfoil with surface, subsurface and air applications.

How To Use: To control watermilfoil when less than 5 gallons of concentrate per acre is directed, dilute the concentrate with water to apply a minimum of 5 gallons of spray mix per acre. Do not treat within 1/2 mile of potable water intakes. Shoreline areas should be treated by sub-surface injection applied by boat to avoid aerial drift. Do not apply when weather conditions favor drift from target area. Do not contaminate water by cleaning of equipment washwaters.

Open Water Areas: To reduce contamination and prevent undue exposure to fish and other aquatic organisms, do not treat water areas that are not infested with aquatic weeds.

Amounts To Use: Apply 2.5 to 2.75 gallons of this product per acre. The higher rate is used in areas of greater water exchange. These areas may require a repeat application.

When To Apply: For best results, apply in spring or early summer when milfoil starts to grow. This timing can be checked by sampling the lake bottom in areas heavily infested with weeds the year before.

Subsurface Application: Apply 2.5 to 2.75 gallons of this product per acre as a concentrate directly into the water through boat mounted distribution systems.

[SUBPART 2]

Surface Application: Apply 2.5 to 2.75 gallons of this product per acre in a minimum spray volume of 5 gallons mix per acre.

Air Application: Use drift control spray equipment or thickening agents mixed into the spray solution. Apply 2.5 to 2.75 gallons per acre of this product through standard boom systems with a minimum of 5 gallons of spray mix per acre. For MICROFOIL® drift control spray systems apply this product in 12 to 15 gallons spray mix per acre. Do not apply within 28 days of previous application.

WATER USE FOLLOWING SUBMERSED APPLICATION

1. Water for irrigation or sprays:

A. If treated water is intended to be used only for crops or non-crop areas that are labeled for direct treatment with 2,4-D such as pastures, turf, or cereal grains, the treated water may not be used until at least five (5) days after application.

B. Due to potential phytotoxicity and/or residue considerations, the following restrictions are applicable:

If treated water is intended to be used to irrigate or mix sprays for unlabeled crops, noncrop areas or other plants not labeled for direct treatment with 2,4-D, the water must not be used unless one of the following restrictions has been observed:

i. A setback distance described in the Drinking Water Setback Table was used for the application, or,

ii. A waiting period of 21 days from the time of application has elapsed, or,

iii. An approved assay indicates that the 2,4-D concentration is 100 ppb (0.1 ppm) or less at the water intake. See Table 3 for the waiting period after application but before taking the initial sampling at water intake.

2. Drinking water (potable water):

A. Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits. The potable water use restrictions on this label are to ensure that consumption of water by the public is allowed only when the concentration of 2,4-D in the water is less than the MCL (Maximum Contaminant Level) of 70 ppb. Applicators should consider the unique characteristics of the treated waters to assure that 2,4-D concentrations in potable water do not exceed 70 ppb at the time of consumption.

B. For submersed weed applications, the drinking water setback distances from functioning potable water intakes are provided in Table 2. Drinking Water Setback Distance (below).

C. If no setback distance from the Drinking Water Setback Distance Table (Table 2) is to be used for the application, applicators or the authorizing organization must provide a drinking water notification and an advisory to shut off all potable water intakes prior to a 2,4-D application. Notification to the party responsible for a public water supply or to individual private water users must be done in a manner to assure that the party is aware of the water use restrictions when this product is applied to potable water. The following is an example of a notification via posting, but other methods of notification which convey the above restrictions may be used and may be required in some cases under State or local law or as a condition of a permit.

Example: Posting notification should be located every 250 feet including the shoreline of the treated area and up to 250 feet of shoreline past the application site to include immediate public access points. Posting should include the day and time of application. Posting may be removed if analysis of a sample collected at the intake no sooner than stated in Table 3 (below) shows that the concentration in the water is less than 70 ppb (100 ppb for irrigation or sprays), or after 21 days following application, whichever occurs first.

Text of notification: Wait 21 days before diverting functioning surface water intakes from the treated aquatic site to use as drinking water, irrigation, or sprays, unless water at functioning drinking water intakes is tested no sooner than (insert days from Table 3) and is demonstrated by assay to contain no more than 70 ppb 2,4-D (100 ppb for irrigation or sprays).

Application Date: _____ Time: _____ .

D. Following each application of this product, treated water must not be used for drinking water unless one of the following restrictions has been observed:

i. A setback distance described in the Drinking Water Setback Distance Table was used for the application, or

ii. A waiting period of at least 21 days from the time of application has elapsed, or,

iii. An approved assay indicates that the 2,4-D concentration is 70 ppb (0.07 ppm) or less at the water intake. Sampling for drinking water analysis should occur no sooner than stated in Table 3. Analysis of samples must be completed by a laboratory that is certified under the Safe Drinking Water Act to perform drinking water analysis using a currently approved version of analytical Method Number 515, 555, other methods for 2,4-D as may be listed in Title 40 CFR, Part 141.24, or Method Number 4015 (immunoassay of 2,4-D) from U.S. EPA Test Methods for Evaluating Solid Waste SW-846.

E. Note: Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intakes.

F. Drinking water setback distances do not apply to terrestrial applications of 2,4-D adjacent to water bodies with potable water intakes.

3. Except as stated above, there are no restrictions on using water from treated areas for swimming, fishing, watering livestock or domestic purposes.

[SUBPART 2]

Table 2. Drinking Water Setback Distance for Submersed Weed Applications			
APPLICATION RATE AND MINIMUM SETBACK DISTANCE (FEET) FROM FUNCTIONING POTABLE WATER INTAKE			
1 ppm*	2 ppm*	3 ppm*	4 ppm*
600	1200	1800	2400
* ppm acid equivalent target water concentration			

Table 3. Sampling for Drinking Water Analysis After 2,4-D Application for Submerged Weed Applications			
MINIMUM DAYS AFTER APPLICATION BEFORE INITIAL WATER SAMPLING AT THE FUNCTIONING POTABLE WATER INTAKE			
1 ppm*	2 ppm*	3 ppm*	4 ppm*
5	10	10	14
* ppm acid equivalent target water concentration			

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition, et al. v. EPA, C01 32C, (W.D. WA). For further information, please refer to EPA Web Site: <http://www.epa.gov/espp>.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in original container in a dry, secured storage area. Keep container tightly closed when not in use. Store at temperature above 32°F. If allowed to freeze, warm to at least 40°F and remix before using. Freezing does not alter this product.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate ground water. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

[**Note to Reviewer:** The following statement will be included on all Final Printed Labels bearing multiple Container Disposal (Container Handling) statements] **NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "No refillable" or "Refillable" designation. Follow the container disposal [handling] instructions below that apply to your container type / size."

[**Note to Reviewer:** The bracketed section headers will be included when multiple container types / sizes are listed on the label.]

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Containers Larger than 5 Gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container Larger than 5 Gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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[SUBPART 2]

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If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV061515)

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[SUBPART 2]

Optional Marketing Claims:

Nufarm Grow a better tomorrow.
Grow a better tomorrow.

[MASTER LABEL]

LABEL HISTORY

FILE NAME	REVISION MARK	COMMENTS
071368-00XXX.20140930.Panther Duo.New Draft	RV093014	R314 Submission - Section 3 Registration Label
071368-00RRL.20141010.Panther Duo	RV101014	Revised per BB.
071368-00RRL.20141103.Panther Duo	RV110314	EPA Review
071368-00RRL.20150610.Panther Duo	RV061015	EPA Review
071368-00RRL.20150615.Panther Duo	RV061515	EPA Review